Notice of Allowability	Application No.	Applicant(s)	
	10/722,848	STRAUCH, GERHARD KARL	
	Examiner	Art Unit	
	Sylvia R. MacArthur	1763	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *the interview of 4/27/2007*.

2. ☒ The allowed claim(s) is/are *1, 2 and 4-21*.

3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☒ All b) ☐ Some* c) ☐ None of the:
      1. ☒ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

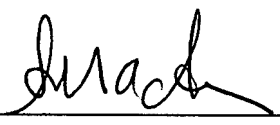
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date *herein* .
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.



EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Christopher Strate on 4/27/2007 and follow-up interview of 6/1/2007.

2. The application has been amended as follows:

Claim 1 reads:

1. (Currently Amended) Arrangement comprising a support body and a substrate holder which is supported thereon and driven in rotation, a gas bearing and a rotary drive being formed by means of gas flowing into the separating gap between support body and substrate holder from nozzles disposed in the support body which open out into the separating gap, characterized in that the support body and the substrate holder are formed as rings, and the support body includes a ring bead which projects into a ring recess in the substrate holder.

Claim 13 reads:

13. (Currently Amended) Device for the in particular rapid heat treatment of flat objects, having a support body and a substrate holder which is supported thereby in such a manner that it can be driven in rotation and on which the flat object can be placed, it

being possible to produce a gas cushion beneath the substrate holder by means of gas which emerges from nozzles disposed in the support body which open out into a separating gap between support body and holding body, on which gas cushion the substrate holder rests in such a manner that it is driven in rotation by directed gas streams, characterized in that the support body and the substrate holder are formed as rings, the support body includes a ring bead which projects into a ring recess in the substrate holder, the support body and/or the substrate holder consist of quartz or ceramic material, the rotationally driven ring has a low heat absorption, and the arrangement is part of a device for the heat treatment of semiconductor wafers.

Allowable Subject Matter

3. Claims 1,2, and 4-21 are allowed.

4. The following is an examiner's statement of reasons for allowance: The prior art of record fails to teach or fairly suggest a support body and a substrate holder wherein the support body and substrate holder are rings. The substrate holder is support thereon on the support body and driven in rotation wherein the support body includes a ring bead which projects into a ring recess in the substrate holder.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Priority

5. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in EPO on April 22, 2002, DE on May 29, 2001, DE on July 19, 2001. It is noted, however, that applicant has not filed a certified copy of the above mentioned application as required by 35 U.S.C. 119(b).

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sylvia R. MacArthur whose telephone number is 571-272-1438. The examiner can normally be reached on M-F during the hours of 8:30 a.m. and 5 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Parviz Hassanzadeh can be reached on 571-272-1435. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Sylvia R MacArthur
Primary Examiner
Art Unit 1763

June 1, 2007

Complete set of Claims

1. (Currently Amended) Arrangement comprising a support body and a substrate holder which is supported thereon and driven in rotation, a gas bearing and a rotary drive being formed by means of gas flowing into the separating gap between support body and substrate holder from nozzles disposed in the support body which open out into the separating gap, characterized in that the support body and the substrate holder are formed as rings, and the support body includes a ring bead which projects into a ring recess in the substrate holder.

2. Arrangement according to Claim 1, characterized in that the rings rest on top of one another in a self-centering fashion.

3. (Cancelled)

4. Arrangement according to Claim 1, characterized in that the substrate is supported on the ring which is driven in rotation only by means of its edge.

5. Arrangement according to Claim 1, characterized in that the substrate rests on the ring with minimal contact, preferably only on the tips of needle-like protuberances.

6. Arrangement according to Claim 1, characterized in that the nozzles open out into arcuate grooves.

7. Arrangement according to Claim 1, characterized in that the nozzles open out into arcuate grooves with alternating preferred directions of gas flow streams, said streams flowing in opposite directions.

8. Arrangement according to Claim 1, characterized by oppositely directed driving gas streams for rotationally bearing and rotationally driving the rotating ring.

9. Arrangement according to Claim 1, characterized in that the substrate is radiation heated from below through the rings.

10. Arrangement according to Claim 1, characterized in that the support body and/or the substrate holder consist of quartz or ceramic material.

11. Arrangement according to Claim 10, characterized in that the rotationally driven ring has a low heat absorption.

12. Arrangement according to Claim 11, characterized in that the arrangement is part of a device for the heat treatment of semiconductor wafers.

13. (Currently Amended) Device for the in particular rapid heat treatment of flat objects, having a support body and a substrate holder which is supported thereby in such a manner that it can be driven in rotation and on which the flat object can be placed, it being possible to produce a gas cushion beneath the substrate holder by means of gas which emerges from nozzles disposed in the support body which open out into a separating gap between support body and holding body, on which gas cushion the substrate holder rests in such a manner that it is driven in rotation by directed gas streams, characterized in that the support body and the substrate holder are formed as rings, the support body includes a ring bead which projects into a ring recess in the substrate holder, the support body and/or the substrate holder consist of quartz or ceramic material, the rotationally driven ring has a low heat absorption, and the arrangement is part of a device for the heat treatment of semiconductor wafers.

14. Arrangement according to Claim 1, wherein the nozzles open out into the separating gap and open out into grooves.

15. Arrangement according to Claim 14, wherein said grooves are formed in the mating surface of said support body opposite the mating surface of said substrate holder.

16. Arrangement according to Claim 15, wherein each nozzle opens out into the proximal end of a corresponding groove.

17. Arrangement according to Claim 16, wherein gas emerging from each nozzle flows in a preferred direction from the proximal end of each groove to the distal end of each groove.

18. Arrangement according to Claim 17, wherein said grooves are distributed on the surface of said support body such that there are alternating preferred directions of gas flows.

19.Arrangement according to Claim 18, wherein said preferred directions are opposite directions.

20. Arrangement according to Claim 19, wherein a portion of said grooves are formed in the surface of said ring bead.

21.Arrangement according to Claim 20, wherein said grooves are arcuate grooves.